THE JOURNAL

... OF ...

The Scottish Rock Garden Club

No. 1 :: 1937

Obtainable from

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PINKHILL HOUSE, EDINBURGH, 12

Price to Non-Members 1/-

THE JOURNAL

of

The Scottish Rock Garden Club

EDITED BY

KENNETH CHARLES CORSAR

No. 1—1937

PUBLISHED BY

THE SCOTTISH ROCK GARDEN CLUB

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EDITOR'S NOTES

IN 1933 The Scottish Rock Garden Club was formed for the purpose, to use the words of its Constitution, "of creating an interest in Rock Garden Plants, to encourage their cultivation, and to hold meetings and exhibitions for that purpose." In the attainment of these objects the degree of success has been remarkable. The Spring Shows held annually in Edinburgh and Glasgow have each year grown in popularity, not only with our own members, but also with the general public. The number of exhibits both amateur and trade has steadily increased and the limit has not yet been reached. This, and the fact that the membership of the Club continues steadily to rise, clearly indicates the great and growing interest that exists in Alpine plants and in their cultivation.

And is this to be wondered at? No garden, however meagre its dimensions, is so small that it cannot house a miniature mountain range on which could be found at any season of the year some one, at least, of its inhabitants in flower. A careful study of writings on Alpine flora, and of the catalogues and lists of those firms who specialise in them, will disclose the wealth of variety and the wide range of choice, in size, in colour and in flowering-season, that exists among plants suitable for the Rock Garden.

Plant hunters still go out to the far distant corners of the earth to return with new and hitherto unknown species; while hybridists are constantly at work seeking to improve on existing forms and to evolve new ones. It has been said that there is nothing new under the sun, but surely this does not apply to Alpine plants.

The cultivation of alpines is a matter that calls for some study and often not a little care. There are one or two guiding principles which must be observed. Soil and situation must be taken care of. It is quite useless to attempt to grow a native of the high alpine regions in a soil that is heavy and tends to become waterlogged in wet weather. Similarly a plant found growing in the shade of a great rock or cliff will never succeed if subjected to the full strength of the sun's rays. To grow successfully any given subject its requirements must first be known. This we learn from experience, either personal, if we have the time and the patience, or from others who have done the experimental work for us.

And here it is necessary to say something about " The Journal," of which this is the first number. Our aim is to make it as interesting and instructive as possible. In it will appear articles by those who have actual experience in the cultivation of rock garden plants, and whose advice is worth following. Notes on new plants will be included and contributions on these subjects will always be welcome.

We acknowledge our indebtedness to all those who have contributed to this number of " The Journal." They have most willingly given of their time and their knowledge, and but for their assistance no publication would have been possible. To our President our special thanks are due, for not only has he written an interesting article but he has also provided the blocks from which the illustrations to it have been taken. For the other illustrations we have to thank Mr Eric P. Laird, who has kindly allowed use to be made of his blocks. And

last, but not least, we must thank Mr Wilkie of The Royal Botanic Garden, Edinburgh, for the valued assistance which he has given in correcting proofs and in other ways.

All matter for inclusion in subsequent numbers of " The Journal " should be sent to the Editor at Rubislaw, Braid Avenue, Edinburgh.

TROUGH GARDENS

By A. O. CURLE, C.V.O., LL.D. (*President*).

THE cultivation of alpine plants in stone troughs has now become a regular practice with alpine gardeners, and it is a fashion which has much to recommend it. The correct soil can be provided; the exposure can, as a rule, be controlled; the plants can be easily tended, being brought nearer to the eye; and they are more accessible than in a rock garden. Moreover, with assured drainage, and the protection afforded by the sides of the trough, the plants flourish better than in the open ground.

In Scotland we have no need to adapt " sinks " for our purpose, for stone troughs were formerly in general use in every farm-steading for the watering of horses and cattle, and they stood before the pumps by the back doors of old houses before the days when water was laid on. Now with the substitution of metal troughs, and the introduction of water into houses they have become obsolete and so are available for gardening purposes. As they are not easily destroyed many of them must be of great age, and a trough, whose surface shows the weathering of centuries, is in itself an interesting possession.

Horse-troughs in that they are larger, and deeper, are the most desirable for our purpose, but unfortunately they are scarcer than the smaller variety, and somewhat expensive either to purchase, or to transfer to one's garden. They are still, however, to be obtained, especially on the outskirts of towns where farms are

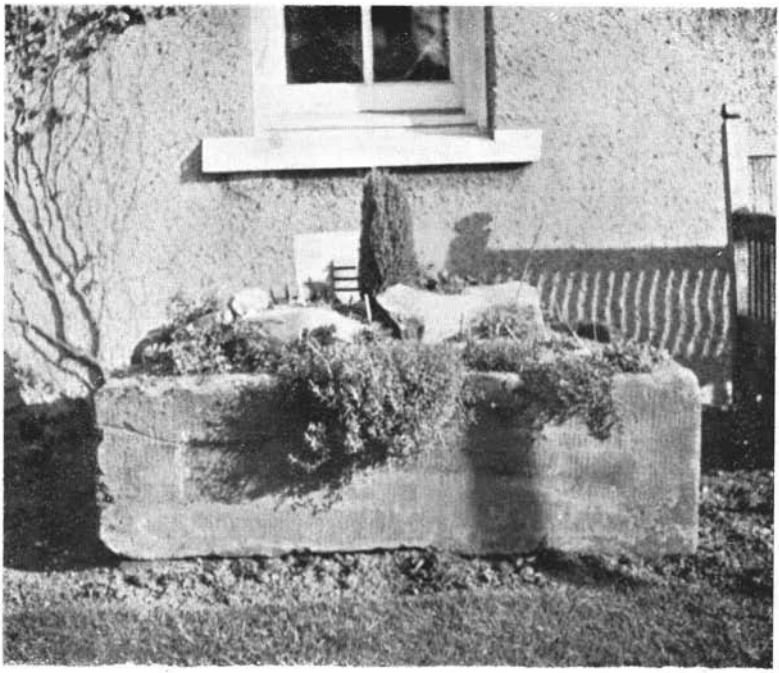


Fig. 1. A WELL-ESTABLISHED TROUGH. *Photo by A. O. Curle.*

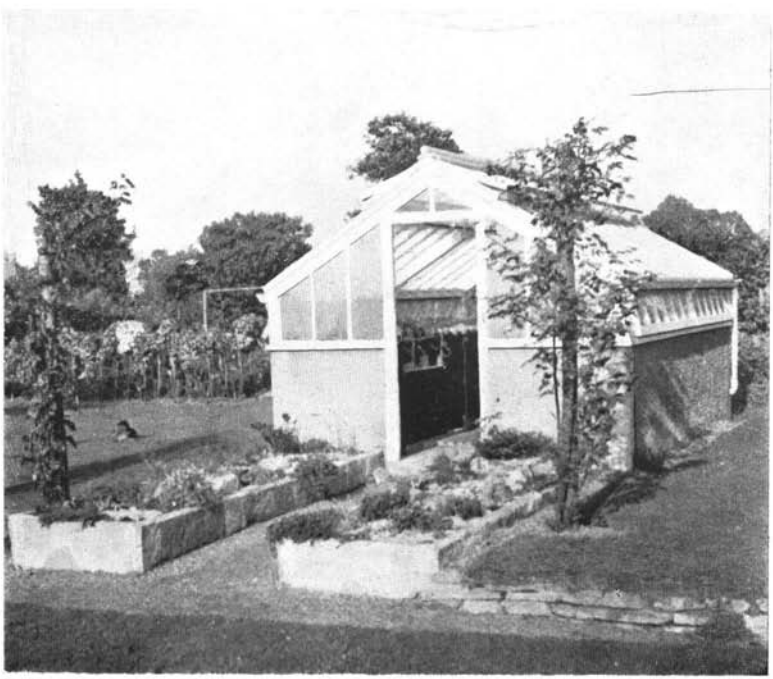


Fig. 2. TROUGH made from Paving Slabs. *Photo by A. O. Curle*

being broken up by the invading builder and the steadings demolished.

Having obtained a trough the next step is to put it in its permanent position, and it will be found that a situation facing west, with shelter from the east, is the most suitable. Care must be taken to place it away from overhanging eaves beneath which it might lose the advantage of rainfall and suffer from possible drip. If it can be raised an inch or two above the ground by the insertion of stones beneath it, slugs are less likely to be troublesome.

The next matter to be attended to is provision for drainage, and to effect this two or three holes according to the size of the trough must be drilled through the bottom. These should be towards either end, and if there is a depression in which water would lie, then one of the holes should be in the centre of it. This accomplished, the bottom should be covered to a depth of a few inches with broken stones.

To fill the trough a compost should be prepared consisting of two parts soil, one part sorbex peat, one part sharp sand, and in addition a liberal allowance of sandstone chips. This last mentioned material may with advantage also be spread over the surface to prevent evaporation, and to keep the foliage of the plants free from contact with wet soil. It is advisable to leave the trough unplanted for a week or two to allow the soil to settle.

In order to render the appearance of the trough garden a little suggestive of the rocky environment in which the plants would naturally flourish, a few stones, if possible of the same character and texture as the material of the trough itself, should be placed on the surface simulating the escarpment of a plateau, or an

outcrop of rock. This will afford surfaces for creeping plants to lie on, and chinks in which to set such as require confined positions.

The variety of plants which may be set in such a "gardens" depends almost on the size of the trough, for most alpines will flourish in such an environment (fig. 1).

Planted on the plateau a dwarf Pine, Cypress, or Juniper, will help the illusion suggesting a lone pine among the rocks. Around the edge such plants as like to trail head downwards should obviously be placed, and Pinks, or Sempervivums, etc., whose habitat is on rock surfaces. Care must be taken to avoid plants that grow too vigorously, for such would soon overrun the "garden."

Should it be desired to keep a trough for one class of plant only, it will be found that either saxatile Primulas, or Gentians, European or Asiatic, will serve such a purpose admirably.

To indicate the variety of Alpines that may be brought together, the following list details that of the actual planting of a trough measuring 4 ft. × 2 ft. 9 ins. × 2 ft. 6 ins. in depth :—shrubs—*Retinospora obtusa nana, Picea Maxwellii*; other plants—*Æthionema Warley Hybrid, Arabis blepharophylla, Aquilegia flabellata nana, Campanula Zoysii, Dianthus Boydii, Dianthus callizonus, Erodium chamædryoides rosea, Gentiana hexa-Farreri, G. Veitchiorum, G. Macaulayi Wellsii, Iris cristata, Lithospermum prostratum, Lychnis alpina, Myrtus nummularia, Pentstemon Newberryi, Phlox adsurgens, Primula auricula x hirsuta, P. farinosa, P. Kitaibeliana, P. Auricula* "Queen of the Yellows," *P. Wulfeniana, Saxifraga Aizoon, S. lantoscana, S. longifolia* "Tumbling Waters," *Sempervivum ornatum, Silene acaulis, Soldanella pusilla alba, Statice minima.*

It may be that in the layout of a garden a trough, or even a pair of troughs, are required to fill some particular space, and are unobtainable. This difficulty may be met by utilising old paving slabs sunk in the ground, and cemented together at the ends. In my own garden I required two troughs 11 feet long, and 3 feet wide, to flank a short path leading to the door of an Alpine house (fig. 2). The soil was dug out to a depth of 2 feet, and the pits thus formed were lined with slabs 3 feet deep, which were thus left projecting 1 foot above the surface. The subsoil was well forked up, and the floor thereafter covered with broken stone, for drainage, to a depth of 6 inches. The troughs thus constructed were then filled with a suitable compost, and to relieve the flat surface, an oblong plateau some 8 feet in length was constructed along the top of each. The whole surface was then covered with stone chips to a depth of an inch or more, and planting proceeded with. All the plants placed in these troughs have flourished exceedingly well.

The trend of the troughs is north and south. On the east side some of the stones forming the wall of the plateau were made to overhang a little so as to provide sheltered nooks for *Primula Winteri*. In the crevices Haberlea and Ramondia are quite at home. In the shade of the plateau wall grow Schizocodon, Shortia, and Soldanella. At the back, before the gable wall of the Alpine house, a colony of *Lilium formosanum* gave during the summer a good display against the grey harling. In the front of one trough is a group of *Gentiana verna* mingling with *Primula frondosa*. Nearby are other Gentians, *Farreri*, *Macaulayi*, *hexa-Farreri*, and *Kurroo*. *Crocus* E. A. Bowles, and *Iris reticulata* are there to give delight at the coming of

the spring. In the other trough, *Iris lacustris*, from two insignificant fragments, has in one year developed to a good clump, and has flowered. *Campanula Allionii grandiflora* and *C. Saxifraga* are both established. The *Dianthus* group is well represented in both by *neglectus*, *Boydii*, *Peristeri*, *hæmatocalyx alpinus* and various others. Phloxes in variety are trailing over the sides. On the plateau of each are two shrubs : in one case a *Daphne caucasica hybrid* and a dwarf Azalea. Here also are plants of *Daphne rupestris* both at the flowering age. Numerous hybrid Saxifrages are showing by their growth that they are happy.

Such are a few of the plants in these troughs. To make a long story short everything appears to flourish, and no plant has ever shown signs of suffering from drought, as is apt to happen in troughs that are fully exposed when the services of the watering can are withheld. The trough garden is easily tended, and above all to cultivate it the minimum of stooping is required, a consideration for the elderly enthusiast.

FERNS FOR THE ROCK GARDEN

By JOHN MACWATT, M.D.

FERNS are not grown and appreciated nearly as much as they deserve. Occasionally in an article on " what to plant in a rock garden " the writer may mention casually that a few ferns may be interspersed between flowering plants, or put in to fill gaps where nothing else will grow, but I have never seen it suggested that some of the finer, choicer forms of British hardy ferns should be included in the scheme, in spite of there being among them some of the most beautiful and interesting plants we can cultivate.

Where shade, even of overhanging trees, menaces the welfare of many good Alpine plants, ferns will not only live and flourish but prove a real asset to the garden and provide sustained interest for nine or ten months of the year.

Whether a section of the rock garden should be solely devoted to ferns, or whether they shall be used in conjunction with the flowering plants, is a matter which depends upon circumstances and personal preference. If they are to have a section to themselves, it is wise to choose a site that is never exposed to scorching summer sun, but if otherwise they should be associated with ramondias, *Haberlea rhodopensis*, *Ourisia coccinea*, and other shade and moisture-loving primulas and dwarf astilbes. From the cultural point of view ferns present little difficulty, especially in the cool and humid climate of Scotland. One important detail must be kept in mind, although almost all ferns delight in copious supplies of moisture in summer and prefer cool shade

to exposure to full sunshine, they do require free drainage and an open, easily penetrable root run. Shelter from wind also is desirable, otherwise young and fragile fronds become bruised, wilted, and disfigured. A fibrous loam with a free addition of sharp grit suits most ferns, and harsh or adhesive soils can be improved by the addition of peat and leaf mould. Rank manure must never be used, but ashes from the rubbish fire will always be welcomed. Bonemeal is the safest form of nourishment and soot water is a better stimulant than chemical fertilisers.

In selection of varieties one is confronted with a vast range and infinite choice. Generally speaking the larger species and varieties of lastreas, athyrums, and polystichums are too big for the average rock garden, but some charming plants are to be found among the smaller gems of each section. Those which bear such distinctive names as fastigiata, congestum, perservatum are almost invariably neat, compact, and interesting, just the kind of plants to fraternise with the choice non-aggressive floral treasures of the rock garden.

Athyrum acrocladon densum is a dwarf, densely crested Lady fern of real merit. *Athyrum cristatum grandiceps* and *Athyrum plumosum cristatum* are two fairly large but extremely graceful varieties for conspicuous positions. *Lastrea propinqua cristata, Lastrea fluctuosa cristata,* and *Lastrea cristata augustata* are three male ferns of moderate size and great charm. The scolopendriums are a wonderful class, and they will grow in limy soil, heavier in texture than many ferns, and their fronds will endure a great deal of sunshine unharmed. The crispums, cristatums, ramocristatums, muricatums, and fimbriatums are all well adapted to rock-work. There are scores and hundreds of sub-

varieties and distinctive forms in all these sections of a most attractive family.

The polypodiums, too, should be grown, and these are most serviceable if there is a stretch of loose stone walling in the rock garden, for they will thrive in the crevices with very little soil as long as they get plenty of moisture. Any of the polypodiums which bear names such as plumosum, pulcherrimum, cornubiense, cambricam or cristatum are worth securing, and as polypodiums are wont to spread by means of surface-creeping thizomes, each kind should be sufficiently separated to prevent intermixing, which is bound to occur in three or four years if they are closely planted in the first place. As a general rule, September is the best planting month, but spring planting may be practised until the time when new fronds begin to unfold. The old fronds should not be cut down in the autumn, but left on for protection until the danger of late frosts in spring is past. They should never be cut off while green, as every green frond cut off means a loss to the plant. I do not remove dead fronds until the end of April or early in May.

Fern hunting is a most interesting and absorbing pursuit, and treasures are still to be found by those who have the patience to look for them, but great care should be taken in removing small pieces of rooted fern not to injure the main plant. I think our Scottish glens with their many burns must be adorned with numbers of these living jewels.

I cannot leave the subject without mentioning one or two names of men who have been prominent in the horticultural world and made Hardy ferns their special hobby and study, and to whom we are indebted for having discovered in the wild, or raised from spores,

many of the choicest and most beautiful varieties. Until recently four of the best collections in Britain were to be found in the town of Reading, Berkshire. Now, alas, three of these have been dispersed following the death of their owners, and horticulture is sadly poorer. One was Dr F. W. Stansfield, an authority on pteridology without an equal. Another was Mr T. E. Henwood who, after attaining high rank among growers and judges of auriculas and carnations, became equally skilful and famous as an expert on ferns. The third was Mr F. Butler, who was better known perhaps to breeders and exhibitors of dogs, of which he was a sound judge and fluent writer, but under the influence and guidance of Dr Stansfield and Mr Henwood he became extremely keen and made a very choice collection of ferns. The remaining member of the quartette is Mr A. T. Macself, the Editor of "Amateur Gardening," who is still carrying on the good work and who has a very fine collection.

My interest in ferns dates from a visit to the late Mr Boyd at Faldonside, who was a great collector and possessed many rare varieties. His daughter gave me the beginnings of my collection, and I have been greatly helped and encouraged by the generosity of Mr Macself and Dr Stansfield, both of whom have stayed with me and given me practical help and advice as well as plants which I could not otherwise have obtained. Mr Henwood also kindly sent me ferns from his garden more than once.

I am fortunate in being able to have a fernery apart from the rock garden, and now have a fairly comprehensive collection of flourishing specimens. I append a list of those that are quite hardy and grow out of doors without protection, unless otherwise specified.

LIST OF FERNS

ADIANTUM *Capillus-vereris*. A British fern, found in the South, but as it is not hardy in the North, in Scotland it must be grown in the greenhouse, where it makes a pretty pot plant.

pedatum (Bird's Foot). A native of N. America, is hardy with me, but in a very severe winter it would be prudent to protect it with some leaves over its roots. It is a beautiful fern growing about a foot high before branching begins, then spreading its five divisions almost horizontally, hence its name.

ALLOSORUS *crispus* (Parsley Fern). The only species of the genus, found plentifully on the rocky hills of Wales and Cumberland, and on Black Hill, Earlston; Eildons; Cheviot, &c.

ASPLENIUM (Spleenwort). These ferns are evergreen and more at home in rock crevices and old walls than anywhere else, and are only found in such positions.

Ruta-muraria (Wall Rue). Frequent, especially on lime-built dykes and old bridges. Found at Grantshouse, Reston, Lauder, &c.

Trichomanes (Maidenhair Spleenwort). Found in various parts of Berwickshire, *e.g.*, Hoolets Crag, on Whitadder, near Cockburn; Pease Dean, &c.

Adiantum-nigrum (Black Spleenwort). Frequent, Fine in Dulaw Dean; Whitadder banks, near Cockburn Mill.

fontanum.

lanceolatum (reputed hardy type).

Trichomanes bipinnatum (Roberts).

forisiensi.

marinum (Sea Spleenwort). Found at Rannel Cove near Siccarpoint, and at various points on coast, *e.g.*, Fast Castle, Pease Dean, &c.

ATHYRIUM F. F. *clarissima aposporus* (Lady Fern). Nice plant.

cristatum gemmatum. Very fine.

crispum cristatum. Good.

ATHYRIUM—continued.

cristatum grandiceps (Druery).
corymbiferum.
acrocladon densum (Stansfield). Very good form; like a strong garden parsley; of compact habit; very distinct.
polydactylum. Good.
Frizellæ. Very good form, remarkable and unique, the fronds bearing round massed pinnæ like a string of beads.
Victoriæ. Very fine. The pinnæ cross each other like lattice work and are crested. It is often called the Queen of Lady Ferns. The fronds attain the length of 3 feet.
Victoriæ purpureum. Very good form; grows taller than *Victoriæ.*
Fieldæ. Very good variety.
cruciatum.
coronatum.
grandiceps.
congestum-cristatum. A dwarf form.
cristatum (Stansfield). A prettily crested form.
proteoides.
plumosum cristatum.
adpresso-cristatum (Scotch find by Cowan).
Filix fœmina. Common Lady Fern found in many parts.
acrocladon.
crispato-cristatum.

BLECHNUM *Spicant.* Hard fern found in many places.
spicant percristatum (Rowlands Pembroke). A small variety.

CETERACH *officinarum* (Scaly Spleenwort). Found at Renton House on a wall; almost certainly not native.
officinarum crenatum. The lobes are cut into blunt teeth.

CYSTOPTERIS *fragilis* (Brittle Bladder Fern). Said to grow at Chester Hill fort near Lauder, and also found in E. Lothian.
fragilis regia.
fragilis cristata. A fine crested form.
alpina dissecta (like the British form).
Dickeana. Very distinct and beautiful crispy variety.

LASTREA *Filix-mas* (Male Fern). Frequent, and in some variety of form.

cristata grandiceps.
cristata fluctuosa. Very densely crested and tasselled.
cristata structuosa.
montana cristata grandiceps.
dilatata.
cristata (rare British species).
propinqua cristata. Very good narrow tasselled form.
pseudo-mas, var. *revolvens.*
paleacea crispa cristata angustata (Lyell). Very good form.
lineare crispissima. A good form.
cristata angustata.
cristata fluctuosa.
œmula. Hay-scented buckler fern.
fragrans. The violet-scented fern.

ONOCLEA *sensibilis* (sensitive form, from N. America. In spring the fronds are a beautiful green. It is easily grown and can be increased rapidly by dividing the creeping thizomes. It is supposed that the fronds do not bear handling, hence its name.

OPHIOGLOSSUM (Adder's tongue). Found in moist meadows and only thrives when grown among grass. I have collected it but have not been able to cultivate it satisfactorily. It is small and has no appearance in a rockery. *Botrychium lunaria* (Moonwort) is found near here, at Wellrig Duns, Langton Glen, and Coldingham Moor, and is another plant it is nearly impossible to transplant.

OSMUNDA. Used to grow on Coldingham Moor ; also there was a plant in Spottiswoode Woods protected by an iron cage, so probably it was not a native.

regalis, the Royal Fern. The best and most beautiful of our native species. If grown in damp, shady places it may reach the height of 7-8 feet or even more.
cristata. A beautiful crested form.
gracilis. Canadian, and is like a dwarf form of our Royal fern.

POLYPODIUM *cristatum grandiceps.*
cornubiense.
longicaudatum. A good form.
cornubiense elegantissimum.
cornubiense multifidum (Clapham).
Prestoni.
Dryopteris. The Oak Fern. Frequently found, usually in a wood, but has been found growing in a turf-built wall in full sunshine. Found near Cockburn Mill, Eller Burn, Abbey St Bathans, &c.
Dryopteris plumosum. The Crested Oak ; very pretty.
plumosum (Whitharris). Very good form.
accumenatum.
omnilacerum (Oxford var.).
pulcherrimum.
bifido-grandiceps.
vulgare. Frequently found.
cambricum. The Welsh polypody.
semilacerum.
cornubiense grandiceps (Cowan).
vulgare Cambricum (Barrowii).
pulcherrimum (Mayii). A sturdy form.
lineare.
rotundatum.
semilacerum undulatum.
Phegopteris. The Beech Fern, found in shady, rocky places in mountainous country, on rock and among stones, chiefly in ravines and on the ground in damp woods. Found in Cuddy Wood, Langton ; near Edins Hall ; Ellerburn, near Abbey St Bathans road.

POLYSTICHUM *pulcherrimum.* Very good form (Druery).
pulcherrimum (Bevis). Very fine.
pulcherrimum (Edwards).
pulcherrimum variegatum (seedling).
angulare plumosum. A large and handsome plumose variety.
angulare capitatum. A fine plant.
angulare pulcherrimum (Moly's Green).
angulare setosa decompositum. Found at Mintern Magna (Stansfield).

POLYSTICHUM—continued.

angulare cristatum. Good.
angulare proliferum.
angulare acutilobum percristatum.
aculeatum. Grows a fine plant, in many hill deans, above Millburn Bridge, Cockburn, Cumledge, near Duns.
aculeatum fastigiatum.
aculeatum divisolobum. Very good form.
aculeatum gracillimum (Stansfield). Very good. This beautiful fern has long graceful fronds, but they are easily broken and should have protection from wind.
acutilobum (Howley's var.).
conjestum cristatum. A good form.
cristatum (Hawkins). A distinct variety.
divisilobum plumosum. A most beautiful fern.
grandiceps (Walton).
lineare Pateyi. A plumose form of great beauty.
Lonchitis (Holly Fern). A stiff-growing evergreen species found among rocky debris on mountains in England and Scotland, but by no means common. Does not increase rapidly.
plumosum (Stansfield).
plumosum (Bland).
plumosum stipulatum.
perserratum.
perserratum cristatum.

SCOLOPENDRIUMS. All are evergreens and hardy. They are said to be the most variable fern in existence, but are a handsome genus, represented by one species but almost endless number of varieties. It is frequent in the South of England, somewhat rare in Scotland, found in Dunglass Dean, Well above Duns Castle, and elsewhere. When found in old walls or rock chinks it is small, but where there is good moist soil and a shady position it grows much larger.

vulgare.
crispum nobile. A very fine form.
crispum nobile (var. Bolton).
crispum sagittatum (Woolaston).

SCOLOPENDRIUM—continued.

crispum (Moses var.). A good form.
crispum speciosum.
crispum aureum.
fimbriatum crispum (Stansfield). Very fine.
grandiceps (Cousins var.). The fronds are heavily crested.
grandiceps crispum aureum.
ramo-cristatum. Fronds branch repeatedly bearing crests at terminals.
sagittato fimbriatum.
spirale.

WOODWARDIA *radicans fimbriata.* Handsome, broad rather coarse arching fronds. From Canary Islands and Southern Europe ; requires a sheltered position and protection from severe cold. Hardy in south-west England, but in Scotland it is safer to take in to cold greenhouse during the winter.

CYCLAMEN

By G. P. PORTER.

THE hardy Cyclamen (or "Sowbread") should be better known and more widely grown than they are at present. They are of easy culture although some are slow to establish themselves. All the species are quite happy in any loose soil which contains a fair proportion of humus. Many people advocate the addition of lime, but my experience is that this is not in the least essential. Cyclamen look best when planted in colonies in the open woodland or in semi-shady nooks in the Rock Garden or shrub border. Let their soil be then for the most part good loam intermixed with leaf mould and limestone rubble or old mortar, top dressing each year with a little half-decayed leaf soil and rubble mixture. It is always better to start with young corms as old collected corms often take a long time to settle down ; in any case for those who do not know much of these beautiful treasures it is as well for you to know that you must have a little patience as you will not get a show of these under a season or two. Once the little plants settle down the colony goes on increasing, the seed taking one season to ripen from the time of flowering and at least, under ideal conditions, two to three more seasons after germination before flowering, therefore it will be seen that it is not a speedy process to increase these plants to flowering stage. Now to those who wish to grow these plants, which may be had in flower often from the end of July until late April or early May with perhaps a brief gap during December, let me give a word of advice. Procure corms from a firm of

repute and always, where possible, start with established corms grown in pots and be very wary of cheap corms offered in the dry state. I have come across, not on one occasion but hundreds, instances where people have failed just because they have purchased corms in the dry state with not a vestige of life left in them. It may also be as well to mention that many of the species have most handsome foliage, being heavily marbled and scalloped at the edges.

CYCLAMEN AFRICANUM—sometimes called *C. macrophyllum*, is in habit very near to *Cyclamen persicum*, producing in Autumn large scalloped, kidney-shaped leaves on stout stems, and pink flowers with pointed petals, the mouth being marked with a ring of bright crimson.

CYCLAMEN ALPINUM—from high up in the Cilician Taurus is yet another Autumn-flowering species with the habit of *Cyclamen cilicicum*; the leaves are bright green on the upper surface, kidney shape, rounded at the end and carmine-purple on the under surface. The flowers are bright rose with a large round blotch of dark purple on the base of each petal, short, wide, blunt not pointed, as in the case of many and tending to spread out more than reflex.

CYCLAMEN x ATKINSII—garden hybrids (*Cyclamen coum* x *Cyclamen ibericum*) that range from crimson-magenta through pink to white; in each case they are flushed with crimson at the base of the petals. In this case the flowers have a delicate perfume, flowering very early in the new year in mild seasons, often commencing before the old year fades out. Here the foliage is not of the dull sullen green as in the case of *Cyclamen coum*, but is relieved with silver-white blotching and appears before the flowering season.

CYCLAMEN BALEARICUM—from stony places in the Balearic Isles, is not far removed from *Cyclamen repandum*, with white flowers half the size and very sweetly scented with a pink throat, flowering in Spring, but very variable as is the case with many of the species. The leaves are on long

stalks, dark green on the upper surface marked with white spots, sparsely toothed here and there round the edge and purple on the under surface.

CYCLAMEN CILICICUM—from the Alps of Cilicia, is a very distinct though variable species bearing flowers from palest to rich pink with long pointed petals and intense crimson markings at the mouth, which is round and narrow. The leaves are small, heart-shaped and marbled, these appearing after the first flowers have opened.

CYCLAMEN COUM—a small choice species with short, broad petalled, very sweetly scented flowers, the type having deep crimson-magenta blooms which often commence to open on the shortest days of the year, continuing until early Spring. There are also pink and white forms which have rather larger flowers than the type. The soldanella-like leaves appear in Autumn and are of a dull dark green without any marbling but with a deep purple under-surface.

CYCLAMEN CYPRIUM—a rare plant in cultivation coming from Cyprus, differing from *Cyclamen Neapolitanum* in bearing white flowers.

CYCLAMEN EUROPÆUM—is one of the best and earliest of all to flower, often commencing in the later part of July and continuing on into Autumn, dainty flowers of crimson-magenta, very sweetly scented, variable in form and size. It is quite distinct in having evergreen, rounded, dull green, smooth-edged, and dimly marbled leaves. It is quite easy in cultivation, although very slow in settling down, but when it does will thrive in sun or shade.

CYCLAMEN GRÆCUM—from the mountains of Greece, is yet another Autumnal flowering species, sending up pink flowers with a deeper base and heart-shaped toothed leaves.

CYCLAMEN HIEMALE—is close to *Cyclamen coum* and *C. Atkinsii*, with deep crimson-magenta short-petalled flowers, with an intense line of crimson in the throat, sweetly scented, flowering during the dark winter months. The leaves are

of the same deep green as in *Cyclamen coum* but mottled with white markings.

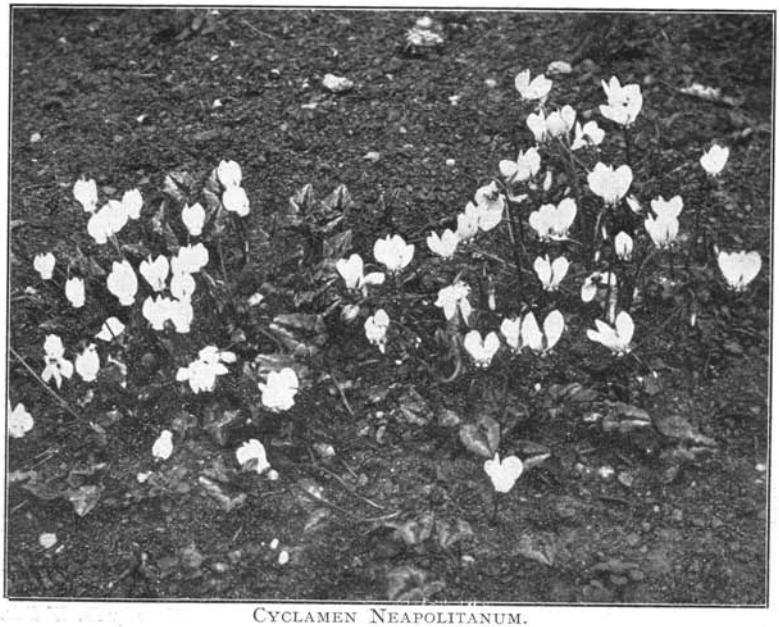
CYCLAMEN IBERICUM—similar in habit to *Cyclamen hiemale.* Flowering in the early months of the year, the carmine flowers often appear before the foliage, which is heart-shaped, mottled, and slightly waved.

CYCLAMEN LIBANOTICUM—from the hills of Lebanon, is a rare species, one of the most beautiful but by no means of easy culture, taking a long time to become established. It should be planted in full sun close up to some small shrub and given a compost with plenty of humus and a liberal supply of lime rubble. The large fragrant flowers appearing in Spring are of a delicate warm rose-pink, the base being intense crimson. The large heart-shaped grey-green leaves appear in Autumn, have irregular toothings round the edge and are marbled with white.

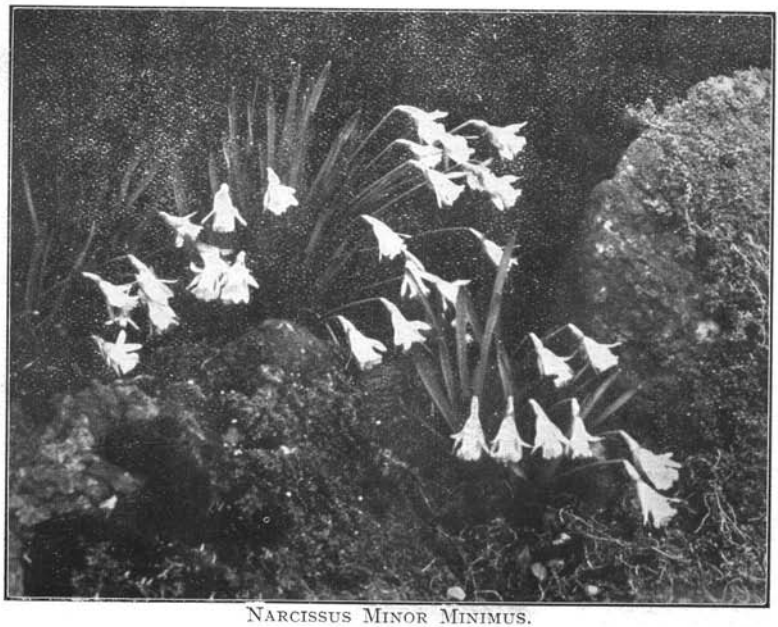
CYCLAMEN NEAPOLITANUM—a well-known species flowering in Autumn with blooms varying through pinks to pure white. The leaves are ivy-shaped, dark green, and in many forms prominently marbled and waved at the edge. They thrive in sun or shade, being excellent among shrubs or in the woodland garden.

CYCLAMEN PSEUDO-IBERICUM—is a variety that of late is becoming comparatively rare. The very sweetly scented flowers appear in the Spring in varying shades of pink with a spot of dark violet to each segment. The leaves are heart-shaped, rounded at the point, lobed and horny on the edges, bright green on the upper surface and marbled with white blotches.

CYCLAMEN REPANDUM—the last of all to flower in Spring, has carmine-pink flowers with long narrow twisted petals. The leaves are broadly heart-shaped, of thin texture, green, but not so prominently marbled as some of the species.

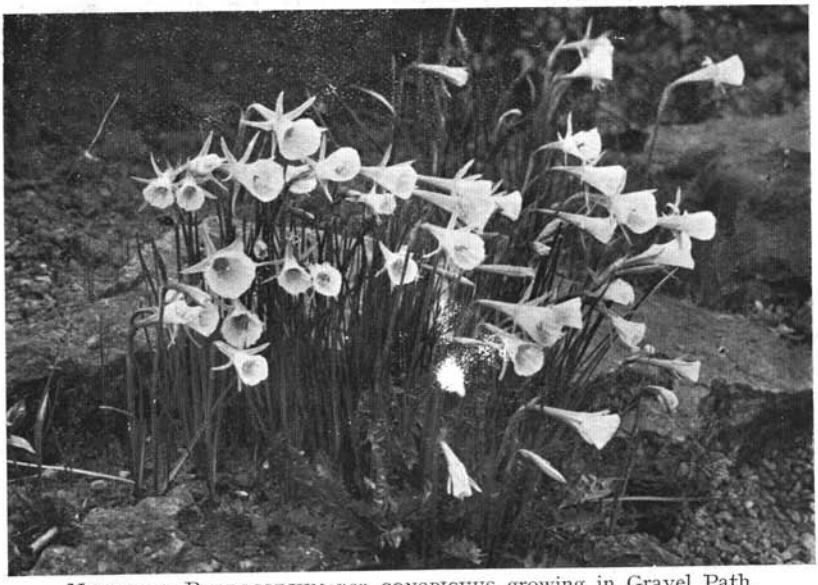


CYCLAMEN NEAPOLITANUM.

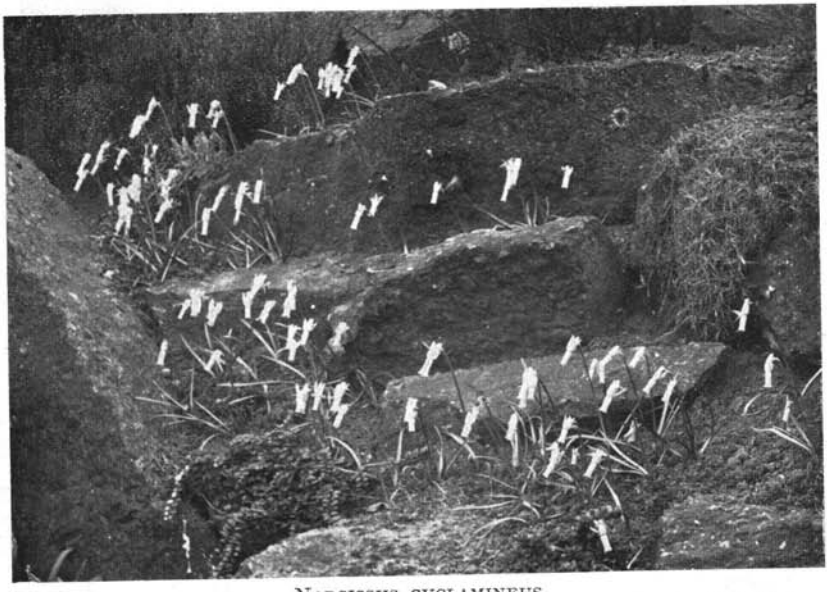


NARCISSUS MINOR MINIMUS.

Above Illustrations by courtesy of Laird & Dickson.



NARCISSUS BULBOCODIUM *var.* CONSPICUUS growing in Gravel Path.
Photo by D. Wilkie.



NARCISSUS CYCLAMINEUS.
Photo by D. Wilkie.

SOME DWARF NARCISSI FOR THE ROCK GARDEN

By D. WILKIE.

SINCE Rock Gardens have become so popular that wherever one goes there are some to be seen, owners are always looking for something new or something they have not already got. Some wish for nothing except alpines—true alpines, and will accept nothing else, but others again are willing to take a wider view and call their plants rock plants and will grow anything that is beautiful, providing of course, that the size of the plant is in proportion to the size of the rock garden.

It is for the latter enthusiasts that this paper is written in the hope that it will give a hint to plants which they hitherto have not grown—to which they do not know or perhaps are afraid to try.

Everyone knows Daffodils when they see them, but it is not of the commoner types that this article is about, but of those scarcer and smaller types which are suitable, owing to their neat and dwarf habit, for the rock garden.

It is not suggested that those bulbous plants should be given places on the mounds to the exclusion of other subjects, but they can at least be spared a corner at the base of the mounds, in the paths, or interplanted with some later flowering plant such as a Campanula.

One objection that people have to bulbs is that the leaves after flowering are untidy, but that objection does not hold in this case, as the leaves are smaller and sometimes very narrow and cannot be compared with the leaves of the garden forms like *King Alfred.*

One word of warning—do not cut off the leaves, but let them ripen naturally; if the leaves are cut off while green, a great deal of strength is lost to the bulb.

Providing certain conditions are given these bulbous subjects, no one need be afraid of failure as their successful cultivation presents no great difficulty.

The first thing necessary, and it is no more necessary for the Narcissi than for any other bulbous plant, is drainage; given this and a good porous loamy mixture with plenty of sand and a little leaf soil with plenty of moisture during the growing season, they will brighten the dull days of the spring. Give them a sunny place and leave them, although after the clumps have been established for some time they may be lifted and divided, but they should not be kept out of the ground any longer than is necessary.

Space will not allow of a detailed description of all the dwarf Narcissi as they run to a great number, and as some of these are very rare (and thereby expensive), only those that are easily procured and not prohibitive in price are mentioned in these notes.

One of the first to make its appearance in the early spring and the neatest of all trumpet Daffodils is *N. minor minimus*. Of only three or four inches in height, it has a perfectly shaped trumpet of clear yellow.

The species *N. minor*, of which this is a form, is taller, sometimes growing up to nine inches in height, and although it is beautiful, it can never compare with the variety.

Following on the flowering season is another trumpet, namely, *N. Johnstoni var. Queen of Spain*. It is a pale yellow and has slightly reflexed perianth.

The Hoop-Petticoat Daffodil, as *N. Bulbocodium*, is called, can be obtained in three different varieties. The

variety *conspicuus*, which on the whole is the strongest grower, sometimes reaches as much as a foot in height. The species itself appears to be very scarce, as it is usually the above variety which is grown in place of it. All have a very large trumpet, very wide at the mouth, and narrowing down to the base; the perianth segments are small in proportion.

Two varieties grow from six to twelve inches high, namely, *conspicuus* and *citrinus*; the former being a clear yellow and the latter a lemon-yellow. The third variety *Clusii* (or *monophyllus*) has pure white flowers and is usually about four inches high.

Narcissus cyclamineus, the Cyclamen-flowered Daffodil, is a very attractive species growing upwards to about eight inches in height. The flowers are pale yellow with very narrow trumpet and with the fairly large segments completely reflexed. Apart from the species, there are one or two hybrids between *cyclamineus* and one of the trumpet Daffodils.

Of an entirely different shape to any of the foregoing is *N. triandrus*, the Angel's-Tear Daffodil. Another difference is, that *N. triandrus* has pendulous flowers and bears two or three to a stem and not just a single flower. There are at least two forms of this—the creamy white and the white variety *alba*. The flowers are well proportioned, the trumpet portion forming a rounded cup with the perianth segments turned backwards.

Yet another shape of flower is found in *N. juncifolius* and its variety *rupicola*. These are tiny flat-cupped flowers like a Jonquil in shape, the former has clear yellow flowers on stems about four inches high, and the latter with deep yellow flowers on stems growing upwards to seven inches in height. Both have grassy-like leaves.

A similar species, which is still very rare, is *N. Watieri*, but the flowers are a pure white.

The Jonquils and the various forms might well be included if only for their sweet scent ; however, these are too well known to require description.

If it is desired to increase the stock of any of these kinds it may be done either by seed or division. The latter is undoubtedly the quicker way, but seed can be raised quite readily of most kinds. Should seed not be required, it is an advantage to the bulbs if the old flowers are cut off to prevent seeding.

In dealing with bulbous plants, especially those whose bulbs are small, every effort should be made to prevent any strength being used without good cause.

HEATHS AND HEATHERS

By R. E. COOPER.

Introductory Chapter.

HEATHS and heather—what pictures these words create. They are a heritage of memories and tradition for one nation, although they grow in other lands as well.

If there be any who know not what these plants are, let the words of Gerarde taken from his Herball, written in 1597, suffice.

" There be divers sorts of Heath, some greater, some lesser, some with broad leaves and some narrower, some bringing forth berries and others nothing but flowers.

" The common Heath is a low plant, but yet woody and shrubby, scarce a cubit high ; it bringeth forth many branches, whereupon also grow sundry little leaves somewhat hard and rough, very like to those of Tamariske, or the Cypress tree ; the flowers are orderly placed alongst the branches, small, soft and of a light red colour, tending to purple ; the root is also woody, and creepeth under the upper crust of the earth : and this is the Heath which the Antients tooke to be the right and true heath."

The heaths and heather of the world are to be found in two well-defined areas, each with distinctive species. One field wherein grow the true heathers ranges from the Atlantic Isles, through Europe, North Africa to the Orient. In the New World Ericas are entirely unrepresented, with the exception of the common Ling which is found, though rarely, in Newfoundland and Massa-

chusetts ; the other lies in South Africa, thus giving the name of Cape Heaths to this class. A few occur on the Kenya peaks, but none are known from Asia or the other Continents of the Southern Hemisphere.

The first group has not more than a dozen species, but they are of infinite value to the garden since they have a multitude of forms and can be hybridised to give plants as valuable, if not more so, than the species themselves. The majority of the Cape heaths will not thrive in the winter in our open gardens, but those that can undoubtedly exercise an influence on them. The European heaths have been known and cultivated from much earlier times than those of Gerarde. The Cape heaths were introduced two hundred years after he had written his Herball.

The interior of Cape Colony consists of tablelands encircled by a chain of mountains parallel to the coast and about 150 miles from it. The central plain is an arid sandy desert, 100 miles across and 3000 feet high, nearly bare for nine months of the year, but after the rains it suddenly becomes covered with brilliantly coloured flowers including many bulbous plants peculiar to that country. Lower down the Pelargonium, Protea and other moisture-loving plants are found in great abundance, while scattered over the whole plain on marshy lands as well as in dry places on the hillside, and reaching to the top of the highest mountain, are the heaths, here a small creeping kind nestling by the side of a stone ; then a large shrub standing boldly up against the heavy storm and fierce sun, as various in their shades of colour, everywhere meeting the eye and always gay.

A plant collector named Francis Masson was sent out by George III through the representation of Sir Joseph

Banks and to him must be given the credit of introducing the Cape Heaths. He was born in 1741 in Aberdeen and died in Montreal in 1805. The Botanical Magazine says in the description of *Erica Massoni* (t. 356) : " This very magnificent African Heath is first described in the *Suppl. Pl.* of the younger Linnæus, and named in honour of Mr Masson, whose exertions at the Cape, where he resided for many years as collector of the natural productions of that fertile spot, have so eminently contributed to render the royal collection at Kew, in this tribe of plants especially, rich in the extreme." The umbels of flowers " are so extremely viscous that scarcely a winged insect can settle on them and escape with its life ; the formidable wasp sometimes becomes its victim, as we once had an opportunity of seeing." Masson sent his seed to Kew Gardens (at that time Kew was a private garden belonging to the Royal family), and it is interesting to know that in 1810 no fewer than 186 species of Heath were in cultivation there. A genus in Liliaceæ was also named in his honour and he was elected a Fellow of the Linnean Society.

At present nearly 500 species of Heath are known in the Cape. They lent themselves readily to hybridisation and their cultivation was taken up by many nurserymen, eminent at that time, including M'Nab of the Botanic Garden, Edinburgh, which he made famous for the collection of Heaths. *'Autre temps, autre mœurs,'* and as other plants attracted interest the heaths ceased to loom so high in popular favour and the various collections decreased.

M'Nab published a " Treatise on the Propagation, Cultivation, and General Treatment of Cape Heaths in a climate where they require protection during the winter months." It has been incorporated in the Notes

of the Royal Botanic Garden, vol. 3, part xv, and provides most interesting reading. It contains lists of " Hardy and Tender Heaths " as well as " the most ornamental Heaths which will flower in succession at all times of the year."

The Hardy Heaths, be it noted, " will stand in the open air in autumn or middle of winter without protection with the thermometer 7 or 8 degrees below freezing, without suffering in any way from such a degree of cold." It also indicates to what degree these plants were fashionable one hundred years ago. A very beautiful hybrid Erica, which is figured in colour in Paxton's Botanical Magazine, vol. vii, 126, perpetuates his name among the flowers.

All words have an origin. Objects of everyday usage are given names which vary in meaning in different localities, in pronunciation, in different tongues, and in some cases, since their original usage has become superseded, obscure in the application.

Why is heather so called? What distinguishes it from ' heath ' ? Heath, heather, and ling are three terms in common use, but it is difficult to say which plant may be referred to in any particular case. The sense of a ' blasted heath ' whereon witches exercise the ritual of their peculiar craft is absolutely different from the affectionately considered ' land of brown heath.'

Heather is of uncertain origin : commonly viewed as related to *heath* ; but the form *heather* appears first in the 18th century, and the earlier *hadder* seems on several grounds to discountenance such a derivation. The word appears to have been originally confined to Scotland (with the contiguous part of the English border) ; the northern English equivalent as in Yorkshire, &c., being *ling* from Norse.

The word ' ling ' comes from the old Icelandic word *lyng*, and is comparable with the Swedish *lingon*, the name of the cowberry derived from *Ljung*. It is first mentioned in literature in 1357, but subsequent writers indicate its value. " In the dales of Richemontshire they burne Linge Petes and Turffes " (Leland, 1538, Itin. v. 122). " She . . . stirred the fire of Ling and brushed the wicker chair " (Crabbe, 1819, Tales Hall xix). " Their huts were always . . . thatched with rushes and ling " (Ouida, 1882, Maremma 1, 124).

The word *heath* on the other hand seems to be native only in Southern and Midland counties, and never to have been applied to the Yorkshire or Scottish ' moors ' ; it is only in comparatively recent times that the southern English *heath* and the Scottish *hadder, hedder,* have been associated, and the spelling *heather* thence introduced.

Some recent botanical writers have essayed to limit the original local names, *heath, ling, heather,* to different species ; but each of these names is, in its own locality applied to all the species there found, and pre-eminently to that locally most abundant. On the Yorkshire and Scottish moors the most abundant is *E. vulgaris,* which is therefore the ' Common Ling ' of the one, the ' Common Heather ' of the other, but in other localities, especially in the south-west, *E. cinerea* is the prevalent species, and is there the ' Common Heath.' Scottish distinctions are *dog-heather, he-heather* (*E. vulgaris*), *Carlin-heather, she-heather* (*E. cinerea*).

Heather is the Scotch name now in general use for the native species of the Linnæan genus, *Erica,* called in the North of England *Ling* ; especially *E.* (now *Calluna*) *vulgaris,* Common Heather, and *E. cinerea,* fine-leaved or lesser bell-heather.

So we come naturally as the localities and types range to Cornish Heath, Mediterranean, Sicilian, Spanish, Tree, Winter and Ciliated heaths as well as false heaths in countries where, perhaps, exiles from heather-country have appreciated in a foreign plant the resemblance to the flower of their native heath, such as Heath of Jericho, Erica (now Anastatica) Hierochuntia "quod similitudinum aliquam habeat cum erica" (1617, Minsheu *Ductor*), the Berried heath, the Crowberry, *Empetrum nigrum*, Irish or St Dabeoc's Heath, *Menziesia polifolia*, Sea Heath, *Frankenia lævis*, while new countries yielded plants of sufficient similarity to warrant names such as Australian and Tasmanian heaths, *Epacris grandiflora* and *E. exserta*, and the American false heath *Hudsonia ericoides*.

After that spate of botanical names it may be well to refer to authoritative distinctions, but since even in the Handbook of the British Flora where 'ling' is given as the common name of *Calluna vulgaris*, and it goes on to say that this plant is the most widely distributed of all heaths (!), while heath is given the common name for Erica, much help does not seem forthcoming from that particular source. First of all why are the two plants called Erica and Calluna? Primarily plants were appreciated and named because they were of some service to mankind. Those plants that were not were ignored and given no name—a practice still holding in the least civilised countries.

When man's consideration of plants reached the stage when all forms were noticed and had to be named so that they could be systematically considered, the primary vernacular names were translated into Latin or Greek and so became stabilised. Other green plants unnamed hitherto and classed as mere herbage were

given names which fitted one or the other of their attributes, so that the plant, branches of which were used as brooms or besoms were labelled with a derivative of the Greek work *Kalluna,* which means ' to sweep,' Erica from the Greek *ereikein,* or *ereico,* which means ' to break ' was bestowed upon the plant which is variously credited with having brittle branches, although this hardly seems its outstanding character, or because, according to Paxton in his Botanical Dictionary from the fact, for which he gives Pliny as the authority, that some of the species were supposed to have a quality of breaking stone in the bladder. This faculty (if true) being medicinal, would seem to indicate a greater and more valued appreciation of the plant than that of mere brittleness.

It may be of interest to consider in simple detail the actual differences between Erica and Calluna.

ERICA	CALLUNA
Has the leaves scattered on the stem or in rings about it. The flower petals are joined in a tube or bell shape which has four little teeth at its mouth. It is longer than the coloured sepals. The fruit consists of several small chambers joined together and splits to shed the seed, when ripe, at the points of union of these chambers. There are many seeds.	Has the leaves set on the stem opposite to each other in pairs. The flower petals form a tube but are not joined for so great a portion of their length so that there are four deep clefts in it. It is shorter than the sepals. The fruit is similarly chambered but splits when ripe down the centre of each outside chamber wall. The seeds are few.

Since there is only one species of Calluna, albeit many forms, there is no need for its further consideration here. Erica has between five and six hundred listed species, but on the other hand the great majority of these are

Cape Heaths whose distinctions have been adequately set out for the most part in Flora Capensis, vol. iv, by Guthrie and Bolus. Since the key for the species occupies pages 6 to 47, the reference may be sufficient for those who wish to study them further.

The species which from the garden viewpoint are of most interest are those in the area known as Mediterranean, including the Atlantic Isles. There are eleven of these and their particular value to the garden is set forth in subsequent chapters. Since some of them are British, some Spanish and some French, no publication has been found which treats them as an entire group, and it is hoped that the key which is to follow may be of assistance.

How much these plants have been woven with Britain's life may be judged by consideration of the words with which their name has been combined :—

Heath-ale —beer, a traditional beverage said to have been anciently brewed from the flowers of heather.

Heath-blooms —a name given by some to the plants of the natural order *Ericaceæ*.

Heath-coal —*see* Heathen coal.

Heath-cropper —one that crops or feeds on heath ; a sheep or pony, living on open heath or down ; hence a person who inhabits a heath.

Heath-fowl —Heath-bird, heath-game, grouse or moor-fowl.

Heath-tax —a tax to defray the expenses of repairing the course at Newmarket.

Heath-throstle —thrush, the Ring Blackbird or Ring-ouzel, *Turdis torquatus*.

One of the early botanical writers (Turner) mentions *E. vulgaris* and *E. Tetralix* and distinguishes them as ' long heath ' and ' small heath.' Dog-heather (Scots) is *E. vulgaris*, while She-heather (Scots) is *E. cinerea*.

In conclusion, all attendants at the shrine of that much appreciated soul-alleviator, Nicotiana, will appreciate the position of the plants which are used in their ritual to hold the burnt offering, and are known in France as ' bruyère arborescent ' (*Erica arborea*) and ' bruyère a balai ' (*Erica scoparia*).

SPRING SHOW 1937, GLASGOW

THE SHOW was held in the McLellan Galleries on 14th and 15th April, the opening being performed by Her Grace the Duchess of Montrose. The number and quality of the exhibits compared favourably with those of former years. The George Forrest Memorial Medal was won by Mr and Mrs Renton, of Perth, with *Primula scapigera*. The Buchanan Cup and the Silver Medal went to Mr Small of Callander, who staged an interesting group of plants.

Among the Nurserymen's exhibits the following were noted :—

Messrs LAIRD & DICKSON.

A plant which attracted a great deal of attention on this stand was the new and rare *Primula scapigera* of the *Winteri* type. Several good dwarf Rhododendrons were shown including *fastigiatum* and *russatum*.

Messrs AUSTIN & M'ASLAN.

A bold outcrop of limestone liberally planted with Aubrietias, Alyssums, *Bellis Dresden China* with several fine specimens of dwarf conifers as a background.

EDROM NURSERIES.

Many of the double Primroses were shown here and a very fine plant of *Anemone Pulsatilla* was outstanding. A large group of *Tulipa Kaufmanniana* was very pretty.

Messrs R. K. GEMMELL & Co.

As usual this firm showed a great drift of the beautiful *Gentiana verna* in full flower, which never fails to arouse the enthusiasm of every garden lover. A group of the dainty *Rosa Rouletti* was also shown in good form here. Several lovely conifers made a beautiful background.

WILLIAM CARVEL.

A miniature scree on this stand was liberally planted with all the choicer Engleria and Kabschia Saxifragas, with *Sax. Griesbachii Wisley* variety outstanding. Ten different species of the lovely Lewisias were also seen on this stand.

THE SPRING SHOW 1937, EDINBURGH

THIS year the Show was held in the Waverley Market, and the Council have felt that the result fully justified their action. Members' exhibits made a splendid nucleus, which was enhanced by the different horticultural traders to make a show which was most favourably commented upon by the press and the visitors to it, and which occupied half of the Market. The entries were more than double those of last year's Show, and the number of exhibits by trade firms was also doubled. The Lady Victoria Wemyss, in declaring the Show open, expressed her pleasure at the increasing size and interest of the Show, and also her hope that it would continue to prosper.

The George Forrest Memorial Medal was awarded to *Shortia galacifolia* shown by Capt. H. Walmsley of Wigtownshire, who also showed Gentians in another class.

The K. C. Corsar Challenge Trophy and Club Silver Medal for six types of Rock Plants in pans went to a collection consisting of—

Rhodo. racemosum (Ward's form),
Nomocharis pardanthina Farreri,
Daphne rupestris grandiflora,
Primula J. H. Wilson,
Lewisia brachycalyx,
Androsace pyrenaica,

shown by Mr and Mrs J. T. Renton, of Perth, who were also successful in the classes for troughs and Androsaces.

The best pan of plants personally collected and grown by the exhibitor was *Primula floribunda*, shown by Lt.-Col. J. C. Dundas, D.S.O., Stirling, collected in

Kashmir. It is not possible to mention separately all the classes which were so well supported, nor the names of the winners in the classes, but the exhibits of Mrs De Pree and Dr Macwatt in particular, since they were not competitive, excited considerable attention, and thereby developed the interests of the Club. A great many other exhibits are worthy of especial mention.

It is also invidious to mention any particular firm among so many who put up such attractive stands, but the range of material embraced every phase of spring garden activity from plants to frames and tools, and that essential winter evening help, books.

It is understood that the Club's appreciation of their help is reciprocated by them in the light of the business transacted at the Show, the extent of which evoked the intention of attending successive Shows with more material.

SECRETARY'S NOTES

SHOWS FOR 1938.—The Glasgow Show will be held in the McLellan Galleries, on Wednesday and Thursday, 13th and 14th April 1938. The Edinburgh Show will be held in the Waverley Market on Wednesday and Thursday, 27th and 28th April 1938. It is hoped that more members will exhibit at these Shows, and attention is drawn to the new class confined to those who have not previously won a prize at one of our Shows. Schedules will be posted to members early in January.

SUMMER MEET.—It is hoped to arrange a meet lasting about one week towards the end of May. It is proposed to visit Perthshire gardens with headquarters at Bridge of Earn. Further intimation on this will be made later.

FORREST BOOK.—A new issue of "The Life and Work of George Forrest" will be made, and copies will be sent to all members who have not already received one.

SUBSCRIPTIONS.—Subscriptions for the year 1937-38 were due on the first of September, and if not already paid should be sent to the Treasurer, Mr D. P. Laird, Pinkhill House, Edinburgh, 12. In future all subscriptions will be collected by him.

Additional copies of the JOURNAL may be obtained (price 1/-) from the Secretary.

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Mr D. P. LAIRD, Pinkhill House, Edinburgh, 12.

Hon. Show Secretaries

Mr W. F. D. FLEMING, 113 George Street, Edinburgh.
Mr R. K. GEMMELL, 18 St Enoch Square, Glasgow.

Hon. Editor

Mr K. C. CORSAR, Rubislaw, Braid Avenue, Edinburgh, 10.

Hon. Director of Re-Unions

Mrs HALLY BROWN, Craignahullie, Skelmorlie.

Hon. Auditor

Mr A. ARNOTT, Union Bank of Scotland.

Constitution and Rules

1. The Club shall be called " THE SCOTTISH ROCK GARDEN CLUB," and is formed for the purpose of creating an interest in Rock Garden Plants; to encourage their cultivation, and to hold meetings and exhibitions for this purpose.

2. The Management of the Club shall be in the hands of a Committee consisting of at least 12 members, with the addition of a President, 6 Vice-Presidents, Secretary and Treasurer, who will retire annually but will be eligible for re-election. Four members shall form a quorum.

3. In the election of Office-Bearers, at least 3 Vice-Presidents and 6 members of Committee must be residents outside the County of Midlothian.

4. The Committee shall have powers to elect Hon. President, Hon. Vice-Presidents, and Hon. Members, and to fill any vacancy on the Committee which may occur during the year.

5. The Annual General Meeting of the Club will be held in the beginning of September of each year, when a duly audited Balance Sheet will be submitted, and when the election of Office-Bearers will take place. Ten members form a quorum.

6. The Annual Subscription shall be Five Shillings or any other sum or a Life Membership of Five Pounds or any other sum, as a General Meeting shall from time to time determine. This subscription entitles the members to all privileges. All subscriptions shall be payable to the Treasurer on the first day of September in each year. The subscription of any new member enrolled after the first day of July shall be deemed to cover the succeeding year.

7. A Special General Meeting may be convened by the Secretary at any time upon the requisition in writing of any ten members of the Club, who shall give at least 21 days' notice. The special business for which the meeting is convened shall be stated in the requisition, and also in the notice calling the meeting, and no other business shall be transacted at such Special General Meeting.

8. Not less than 7 days' notice of each General Meeting shall be given or sent by post to all members of the Club.

9. An Auditor shall be appointed at the Annual General Meeting. who shall audit the Annual Statement of Accounts and Balance Sheet, and certify the same before the Annual General Meeting.

10. The investments of the Club shall be vested in three Trustees to be appointed at a General Meeting of the Club. The Trustees shall deal with the same in such manner as any General Meeting or the Committee shall from time to time direct. The Committee shall have power to fill up any vacancy which may occur by resignation or death during the year.

11. The Committee may make Bye-laws and Regulations consistent with these Rules, as may be considered necessary for the proper management of the Club's affairs and for the conduct of their now proceedings.

12. No Rule shall be altered or repealed, and no new Rule shall be made, except by a majority of at least two-thirds of the members present and voting thereon at a General Meeting, and notice, in writing, of any resolution to alter, repeal, or add to the existing Rules shall be given to the Secretary, not less than twenty-one days before the meeting at which it is to be dealt with.

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THE SCOTTISH ROCK GARDEN CLUB.

FORM OF PROPOSAL FOR MEMBERSHIP.

This form may be sent with a remittance of **5s.** minimum as a subscription for one year, or **£5** for Life Membership.

To Mr DAVID P. LAIRD (Secretary and Treasurer),
Pinkhill House, Edinburgh, 12.

I, *Mr / Mrs / Miss* .....
(Please write in Block Letters.)

Address .....

.....

.....

enclose the sum of.....being my Membership Subscription for the year.....

Date..... *Signature*.....

(*Cheques may be crossed "Union Bank of Scotland."*)

BANKER'S ORDER FORM.

To.....

.....

Please pay to Mr DAVID P. LAIRD, Pinkhill House, Edinburgh, 12, on receipt of this Form, * the sum of Five Shillings, my Subscription to The Scottish Rock Garden Club for the year 19....., and a like sum on the 1st of January in each succeeding year until otherwise ordered * or the sum of £5, being the Subscription for Life Membership.

2D.
STAMP

If you decide to use this Form, kindly send it completed to the Club Treasurer.

* *Delete item not required.*

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